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THE JOURNAL OF PHILOSOPHY

THREE MEANINGS OF "TRUTH"

THE three meanings of "truth" to be discussed are:

(1) Truth as a nontemporal property of propositions.
(2) Truth as warranted assertability.
(3) Truth as an ideal of ultimate pervasive coherence in a total experience.

I shall make the point that the first meaning applies only to logical truth, i.e., to analytical propositions, whereas the second meaning is related to the process of validation of synthetic propositions. The discussion of the third meaning will be brief. I shall suggest that it be reinterpreted as a regulative principle for the establishment of rules of procedure (standards of validation).

The view to be outlined implies the rejection of a general notion of truth which comprises rational (necessary) truth and factual (contingent) truth. The conception of truth and falsity as nontemporal properties of propositions—synthetic as well as analytic propositions—is firmly embedded in philosophical tradition, and it also seems to be in tune with the common use of the two words. However, we are confronted with a serious difficulty as soon as we apply this notion to empirical inquiry, which is generally held to be a search for factual truth. This difficulty is raised by the question: How can we ever know that we have found a factual truth? The question becomes more pointed by contrasting the results of empirical inquiry with the results obtained by pure reasoning, e.g., in a mathematical proof. A rigorous mathematical proof establishes indubitable knowledge of rational truth; but knowledge obtained by empirical inquiry is not supposed to represent indubitable factual truth. The reversibility of every result obtained at a given stage of scientific inquiry is regarded as essential for scientific method.

These considerations were conducive to the view that knowledge of factual truth must be interpreted as imperfect (or probable) knowledge; as an approximation to factual truth rather than as its attainment. It was intimated that we can not obtain absolutely certain (perfect) knowledge, because we are incapable of

gathering all relevant data, but that we can gradually approach certainty by gathering more and more relevant data.

But this interpretation is open to a stricture similar to the one it seeks to meet. How can we know—it may be asked—that continued scientific inquiry will lead us ever more closely toward perfect knowledge of factual truth, if every result obtained at any stage of inquiry is liable to be reversed in the course of subsequent inquiry? It does not seem to make sense to regard both a proposition *asserting* a certain state of affairs, and a proposition *denying* this state of affairs, as approximations to the self-same factual truth. The view that a scientific result represents a probability of having attained the truth can be attacked on similar grounds. As soon as we assign a procedurally significant meaning to the word "probability," as used in this context, we find that such a meaning is unrelated to a notion of factual truth conceived as a nontemporal property of synthetic propositions.

Thus it would seem that this notion has no place at all in the logic of science and that we must not refer to it in the definition of any methodological term such as "scientific method," "empirical knowledge," "confirmation," "evidence," etc.

But this conclusion is open to the objection that we could not account for the applicability of the principles of deductive logic to empirical science unless we presupposed a general concept of nontemporal truth which comprises factual truth as well as logical truth. The conjoined principles of contradiction and excluded middle—it may be argued—assign to every proposition, whether synthetic or analytic, one, and only one, of the two truth-values "true" and "false"; and these principles are essential for the procedure of empirical science. Hence (it is concluded) we do imply in the meaning of "scientific inquiry" the notions of truth and falsity as nontemporal properties of synthetic propositions. Thus we seem to be confronted with the alternative: either we cling to the notion of nontemporal factual truth, and we have to admit that the standards of validation in empirical science can not be regarded as criteria of factual truth—so that factual truth becomes a transcendent notion—or we insist upon these standards being criteria of truth, and we have to grant that the principles of contradiction and excluded middle, which (purportedly) imply the notion of nontemporal truth, do not hold for factual truth.

It is the principle of excluded middle rather than the principle of contradiction which is supposed by contemporary philosophers to be primarily affected. Bertrand Russell, for instance, in his *Inquiry into Meaning and Truth*[1] points out that we can not

[1] New York, 1940.

escape from this dilemma. He resolves—rather hesitatingly—to stick to the principle of excluded middle and to pay the price of allowing for a notion of transcendent truth. I shall quote the sentences in which he lays down this resolution:

> Although the above discussion has been so far very inconclusive, I find myself believing, at the end of it, that truth and knowledge are different, and that a proposition may be true although no method exists of discovering that it is so. In that case we may accept the law of excluded middle. We shall define "truth" by reference to events (I am speaking of non-logical truth), and "knowledge" by relation to "percepts." Thus "truth" will be a wider conception than "knowledge." It would be a practically useless conception, but for the fact that knowledge has very vague boundaries. When we embark upon an investigation, we assume that the propositions concerning which we are inquiring are either true or false; we may find evidence, or we may not. Before the spectroscope, it would have seemed impossible ever to ascertain the chemical constitution of the stars; but it would have been a mistake to maintain that they neither do nor do not contain the elements we know. At present, we do not know whether there is life elsewhere in the universe, but we are right to feel sure that there either is or is not. Thus we need "truth" as well as "knowledge," because the boundaries of knowledge are uncertain, and because, without the law of excluded middle, we could not ask the questions that give rise to discoveries.[2]

In examining Russell's argument we find that it does not penetrate to the core of the issue because it fails to distinguish between "technical impossibility" and "logical impossibility." The crucial question in an analysis of the meaning of "factual truth" and its relation to "empirical knowledge" is whether we ought to introduce a notion of factual truth which is logically independent of standards of validation. It does not matter whether verification in terms of these standards is technically possible at a given stage of inquiry. Russell suggests that before the invention of the spectroscope, it would have seemed impossible ever to ascertain the chemical constitution of stars; but the establishment of standards of verification for propositions concerning the chemical structure of bodies did not have to wait for Kirchhoff's and Bunsen's invention of the spectroscope. Such propositions could be verified by test-tube experiments. The technical impossibility of performing such experiments on the fixed stars is irrelevant for the logic of science.

Rudolf Carnap, in his first contribution to the Symposium on Probability,[3] agrees with Russell in rejecting the substitution of "verified" for "true," and in declaring that this substitution is incompatible with the principle of excluded middle.[4] But he differs from Russell in maintaining that this position does not involve

[2] Pp. 360 f.

[3] *Philosophy and Phenomenological Research*, Vol. V (1945), pp. 513–532.

[4] P. 530.

the admission of a concept of transcendent (metaphysical) truth. Carnap makes the point that it is not required for the meaningfulness of a notion of factual truth that we should be able to attain truth, to acquire perfect factual knowledge. This, he grants, is impossible since every scientific result may have to be reversed; but he holds that imperfect knowledge—confirmation of truth to a certain degree—which is actually achieved by scientific inquiry, suffices for rendering the notion of nontemporal truth empirically significant. But I do not think that he has actually established his point. The notion of nontemporal factual truth is, according to his own admission, not internally related to confirmation; it can therefore not be vindicated by connecting it with confirmation. But I shall not develop this stricture here.[5] I shall rather try to refute the view that the applicability in empirical science of the principle of excluded middle, or of any other principle of deductive logic, depends upon the adoption of a notion of nontemporal factual truth; or, in other words, upon a general concept of truth which comprises both logical and factual truth.

In embarking upon this task we have to emphasize, first of all, that reference to the general concept of truth is not required in pure deductive logic, understood as a formal theory of internal relations among propositions and terms. But we need not dwell upon this point; for it is at present almost universally acknowledged that these relations are fully covered by intensional logic, which is not supposed to include the general notion of truth. Moreover, it is recognized that a proposition is logically true *qua* being analytical, and that a proposition is logically false *qua* being a contradiction; so that it is possible to replace the words "logically true proposition" by "analytical proposition" (or "tautology"), and "logically false proposition" by "contradiction."

However, the introduction of a general notion of truth is usually supposed to be required in describing the application of deductive logic in empirical science. This view was recently restated by Carnap in his attempt to vindicate the significance of the notion of nontemporal factual truth for the logic of science.[6] Having stressed that the concept of truth is not used in his definitions of range, L-implication and degree of confirmation, i.e., of those concepts which he regards as basic for deductive and inductive logic, respectively, he continues: "On the other hand, there are impor-

[5] I have done this briefly in two papers in the Symposium on Probability and, in more detail, in another paper to be published in *Philosophy and Phenomenological Research.*

[6] In his third Symposium paper "Rejoinder to Mr. Kaufmann's Reply," *ibid.*, Vol. VI (1946), pp. 609–611.

tant relations between deductive concepts and the concept of truth. Thus, for instance, from the statement '*i* L-implies *j*' . . . we can infer 'if *i* is true, then *j* is true.' . . . Note that the latter statement is merely a consequence of the former; it does by no means say the same." [7]

The reason why the two statements do not say the same is obviously that the latter contains a term which is not contained in the former, viz., the term "true." Accordingly it might be suggested that the relation between the two propositions is similar to the one between, say, "All men are mortal" and "All men who are vegetarians are mortal." There is, however, a decisive difference between the two cases. In deducing "All men who are vegetarians are mortal" from "All men are mortal," we presuppose that "vegetarian" has a definite meaning; otherwise there could not be any proposition containing a term "vegetarian." Similarly we have to presuppose in the case under consideration a definite meaning of "truth"; but the legitimacy of this presupposition is just the point at issue.

The following argument might be offered in an attempt to establish this point. In testing a proposition, e.g., a proposed law, we assume tentatively the truth of the proposition, and derive from it, and other propositions which are supposed to be true, logical consequences which can be checked by observation. The description of this procedure—it may then be declared—includes reference to an operationally significant meaning of truth. This can, indeed, be readily admitted; but "truth" understood in this sense must not be interpreted as a nontemporal property of propositions. The words "true proposition" as used in this context may be replaced by "verified proposition" or (as I prefer to say) by "accepted proposition." By performing this substitution we make it clear that the argument does not establish the point it seeks to establish. But this result should not lead us to the rash conclusion that we can always replace the words "true synthetic proposition" by "accepted (verified) synthetic proposition."

Such a substitution can not be performed in the principle of excluded middle. First of all it is readily seen that we can not replace the sentence "Every proposition is either true or false" by the sentence "Every proposition is either accepted or unaccepted at a given time." The latter sentence obviously fails to convey the intended meaning of the term "false." If we replace "true proposition" by "accepted proposition," then we must not replace "false proposition" by "unaccepted proposition," but rather by

[7] P. 611.

"proposition the negation of which is accepted." When we do this, we obtain the statement: For every proposition *p*, either *p* or *non p* is accepted at any definite stage of scientific inquiry. It goes without saying that this statement is untenable, and that it does not represent an application of the principle of excluded middle to empirical science.

We have already intimated what the application of this principle in empirical science is taken to mean: it postulates the verifiability or falsifiability of every given proposition. Recent discussions concerning the bearing of Heisenberg's principle of indeterminacy upon the principle of excluded middle have brought this point into sharp focus. But in granting this we find ourselves confronted with the question: Do we actually dispose of truth and falsity understood as nontemporal properties of synthetic propositions by introducing the words "verifiable" and "falsifiable" for "true" and "false" respectively?

In examining Russell's view I have made the point that the terms "verifiability" and "falsifiability" as understood in the logic of science must not be taken to imply technical possibility of verification or falsification. But this very statement might seem to lead us back to the notions of nontemporal factual truth and falsity. How—it might be asked—can we know that every proposition is either verifiable or falsifiable, unless verifiability and falsifiability are properties of all propositions, unless they are implied in the meaning of the term "proposition"? But provided this is the case, why should we replace the time-honored words "true" and "false" by "verifiable" and "falsifiable" respectively?

A preliminary answer to the second question can be derived from the preceding argument, which stressed the point that the standards of validation provide for the reversibility of every result obtained in empirical science. It follows that verifiability and falsifiability can not be identified with, or even traced back to, nontemporal truth and falsity respectively. But the first question requires some further analysis.

The view that standards of validation are implicitly referred to in every genuine (synthetic) proposition was presented in slightly different formulations by Peirce, Bridgman, and Wittgenstein, and unreservedly endorsed by logical positivists till the early 'thirties. Later on, logical positivists were led to various modifications of this tenet, primarily by reflections upon the nature of scientific laws. Ludwig Wittgenstein had emphasized that laws can not be verified and declared that they should, therefore, not be regarded as genuine propositions. They are, he intimated, rather suggestions for the formation of propositions. But Carnap and

other members of the group became eventually dissatisfied with this formulation which didn't square with the general use of the term "proposition." Karl Popper, in his *Logik der Forschung*,[8] tried to dispose of the predicament by pointing out that only falsifiability should be regarded as a standard of meaningfulness, as a criterion for discerning (*Abgrenzungskriterium*) between genuine sentences and the pseudo-sentences of metaphysics. Carnap—apparently influenced by Keynes's notion of degrees of rational belief and by Reichenbach's interpretation of probability—suggested that the requirement of verifiability should be replaced by the requirement of confirmability in different degrees. But it does not seem to me that either of these modifications of the tenet that propositional meaning implies verifiability is apt to dispose of the crucial objections which may be raised against this view.

It will suffice for our argument to mention but one of these strictures. We do not suppose that the propositional meanings with which we are concerned in deductive logic are affected by any changes in the adopted standards of validation that may take place in the process of empirical inquiry. Yet this would have to be the case if the meaning of the term "proposition," as understood in deductive logic, did imply reference to standards of validation. But when we acknowledge the cogency of this stricture we have still to answer the question, how the standards of validation are related to propositions.

It will be convenient though not essential for the following argument to introduce at this juncture the word "assertion." I shall make the point that reference to standards of validation is not implied in the meaning of "synthetic proposition," whereas such reference is, indeed, implied in the meaning of "assertion." In developing this argument I shall define the methodological terms which have been used so far.

That we should discern between proposition and assertion has recently been emphasized by C. I. Lewis,[9] who credits H. M. Sheffer with having drawn his attention to this point. "A proposition," Lewis points out, "is a term capable of signifying a state of affairs. To define a proposition as an expression which is true or false, is correct enough but inauspicious, because it easily leads to identification of the proposition with the statement or assertion of it; whereas the element of assertion in a statement is extraneous to the proposition asserted. The proposition is something assert*able;* the *content* of the assertion; and this same content, signifying the

[8] Vienna, 1935.

[9] *An Analysis of Knowledge and Valuation*, La Salle, Ill., 1946, pp. 48 f.

same state of affairs, can also be questioned, denied, or merely supposed, and can be entertained in other moods as well."

In applying this distinction to the logic of science we have to realize that the process of validation is not related to propositions as such, but to the *acceptance* of propositions. We may conceive of a synthetic proposition as a presentation of a possible state of affairs; to accept the proposition is to assume that the proposed state of affairs is real. (This formulation is big with problems; but these problems do not directly concern us here.)

A sharp distinction, at each stage of inquiry, between propositions which are accepted, and propositions which are not accepted at this stage, must be postulated by the logic of science. This is readily seen if we consider that only accepted propositions—in other words, propositions which belong to the body of knowledge—are eligible for the function of grounds in empirical inquiry. This postulation is of course an idealization; but idealizations are as essential for the logic of science as they are for deductive logic. They are presupposed in *scientific criticism*. In judging whether a scientific argument is correct, we must be able to decide unambiguously whether the reasons advanced in its support are scientifically established; whether they are propositions which have been accepted in conformity with the adopted standards of validation.

To adopt standards of validation is to establish conditions for the acceptance of propositions and for the reversal of their acceptance. "Verification" and "falsification," as well as "verifiability" and "falsifiability," are to be defined in terms of these standards (rules). We mean by "*verification* of a proposition" the demonstration of its acceptability in terms of given rules. A proposition is called "*verifiable in principle*" within a given system of rules if conditions for its acceptance are established within the system. A proposition is called "*actually verifiable*" at a given stage of inquiry if the conditions for its acceptance are fulfilled at this stage of inquiry. By *falsification* of a proposition p we mean the verification of *non* p and, accordingly, by *falsifiability* of p, the verifiability of *non* p.

We are now prepared to define the term "*assertion.*" The assertion of a proposition p is taken to mean either (a) p is at present actually verifiable, or (b) p would become actually verifiable, if future inquiry were directed towards this goal. We may call assertions of the first type "*definite assertions*" and those of the second type "*indefinite assertions.*" It is not required for our argument to stress the difference between these two types of assertion. The point that matters here is that "assertion"—in

contradistinction to "proposition"—is defined in terms of standards of validation. We *warrant* the assertion of p by verifying p, that is, by demonstrating the acceptability of p.

The preceding definitions will be of avail in a reinterpretation of the principles of contradiction and excluded middle, understood as principles of empirical procedure. Bearing in mind that "falsification of a proposition p" has been defined as verification of *non* p, we see that the postulate of verifiability in principle of *every* proposition and the postulate of falsifiability in principle of *every* proposition are logically equivalent. They amount to but one postulate. The clear understanding of this postulate has been balked by its identification with the principle of excluded middle in deductive logic.

Similar considerations hold for the principle of contradiction. The two principles, as understood in deductive logic, are simply explications of the meaning of "negation." They do not establish any norms for the process of validation, whereas the corresponding principles in empirical science are, indeed, supposed to establish such norms. We shall therefore distinguish between the principles of contradiction and excluded middle in deductive logic and their *procedural correlates* in empirical science. What we mean by the procedural correlate of the principle of contradiction is the demand that the simultaneous presence of two logically incompatible propositions in the body of accepted propositions be ruled out. This demand imposes restrictions upon systems of standards of scientific validation. The demand is fulfilled if and only if the system of rules contains the following provisions:

(1) Simultaneous acceptance of contrary or contradictory propositions must be precluded.

(2) Simultaneously with the acceptance of a proposition p all propositions contradicting p must be eliminated from the body of accepted propositions.

It is seen that the procedural correlate of the principle of contradiction does not imply the conception of truth and falsity as nontemporal properties of synthetic propositions.

This holds likewise for the procedural correlate of the principle of excluded middle, which demands that the rules of procedure allow for *verifiability in principle* of every proposition. It is equivalent with the postulate of universal assertability. Empirical inquiry is exclusively concerned with assertable propositions, *qua* assertable; but deductive logic deals with propositions as such, irrespective of their assertability. It follows that we must clearly distinguish between meaningfulness and assertability. "Meaning-

fulness" is implied in "assertability"; but the converse relation does not hold. This remark applies to propositions the assertability of which is excluded by Heisenberg's principle.

Further light may be shed on the procedural correlate of the principle of excluded middle by comparing it with the postulate that every scientific result must be reversible; in other words, that the standards of validation must establish conditions for the elimination of every previously accepted proposition from the body of accepted propositions—from the corpus of knowledge at a given time. This postulate, which I have called the *principle of permanent control,* is a counterpart to the procedural correlate of the principle of excluded middle. The conjoint two principles stipulate that the status of every proposition at any given stage of scientific inquiry must be reversible.

We have reached the conclusion that the abandonment of the notions of factual truth and falsity conceived as nontemporal properties of propositions does not affect the principle of excluded middle, nor any other principle of deductive logic. This result vindicates the view that there is no place for these notions in the logic of science. Hence we must not refer to them in defining any term in the logic of science. Such terms as "scientific method," "problem," "solution," "evidence," "explanation" are rather to be defined in terms of standards of validation.

The terms "problem" and "solution" may serve as examples. We may introduce distinctions between "question" and "problem," on the one hand, and between "answer" and "solution" on the other, which correspond to the distinction between "proposition" and "assertion."

Let us suppose that the following three propositions have been offered as answers to the question: In what year was Aristotle born?

(*a*) Aristotle was born in the year 384 B.C.
(*b*) Aristotle was born in the year 338 B.C.
(*c*) Aristotle was born at Stagira.

No empirical investigation is required for the rejection of (*c*) as an answer to the given question; we can reject it *a limine* because it is not to the point. What we need for its rejection is only a comparative analysis of meanings. The propositions (*a*) and (*b*), however, do represent answers to our question, but neither of these answers may be regarded as the solution of the underlying scientific problem, unless it is verified, i.e., unless we demonstrate its acceptability in terms of given standards of validation. If we define "problem" as "demand for a *true* answer to a given ques-

tion" and "solution" as "presentation of a *true* answer"—whereby truth is conceived as a nontemporal property of propositions—then we can never be able to vindicate the claim that an empirical problem has been solved. But scientific inquiry is, indeed, supposed to make possible the vindication of such claims. It is thus seen that definitions of "problem" and "solution" in terms of "nontemporal factual truth" are not in conformity with the use of these terms in inquiry.

I shall now briefly discuss the bearing of this conclusion upon the issue of the relation between deductive and inductive logic. Logicians who presuppose a general concept of truth, which covers both logical truth and factual truth, are apt to regard induction as an approximation to truth (as probable inference), and to interpret deductive logic as the limiting case in which truth (or certainty) is attained. But this interpretation is untenable. The conclusion reached by inductive inference from p_1 to p_2 is quite different from the conclusion obtained by the corresponding process of deduction. By deducing the synthetic proposition p_2 from the synthetic proposition p_1, we demonstrate that p_2 is logically implied in p_1. If we then introduce the term "acceptance," we can draw the conclusion that acceptance of p_1 includes acceptance of p_2. The reference to acceptance is here, as it were, a *secondary* matter. In an inductive inference, however, we are *primarily* concerned with the acceptance of propositions. We establish by an inductive inference from p_1 to p_2 that p_2—which is supposed not to be logically implied in p_1—may be accepted, if p_1 belongs to the body of accepted propositions. Here we have implicit reference to standards of validation, since "acceptability" is defined in terms of these standards (rules). When the rules are made explicit, it is seen that inductive inference demonstrates what it establishes. Inductive inference is subsumption under rules. It is therefore misleading to contrast inductive inference as nondemonstrative, with demonstrative deductive inference.

A misplaced analogy between the syntactical rules of deductive inference and the procedural rules of inductive inference suggests the demand for an ultimate justification of the rules of induction corresponding to the intuitive distinction between valid moods and invalid moods of the syllogism; David Hume has convincingly shown that this demand is ill-considered and unfulfillable.

But to discard this quest for *ultimate* justification of the rules of induction is not to deny that a genuine problem is raised by the demand for their justification; the problem, namely, of clarifying the standards by which we judge the appropriateness of rules of

induction. To state that "success" in applying the rules is the standard is little more than another way of posing the problem; for we are now confronted with the question: what are the criteria of success? A tentative answer to this question is ready at hand. The conclusions which we obtain by inferences in conformity with the rules must be confirmed by observational tests. But this answer does not lead us very far either; for the meaning of "testing" points back to an intricate system of rules. This is readily understood as soon as we dispose of the erroneous view that a test is a confrontation of a proposition with data of immediate experience. Once this has been done, it becomes apparent that we have to refer to theoretical goals of inquiry, such as systematic unity and simplicity of knowledge, in defining "success" or "progress" in science.

The procedural significance of the third conception of truth which we listed above, viz., the conception of truth as an ideal of ultimate pervasive coherence, derives from the synthesis of the theoretical goals of scientific inquiry which it implies. But we should not conceive of these goals as pre-established infinitely remote signposts toward which inquiry moves, but rather as a set of interrelated regulative principles for the formation of rules of procedure. Rules of scientific procedure are vindicated, if their application leads to scientific progress, as defined in terms of these regulative principles. In the opposite case, the rules have to be altered. The question whether at a particular stage of inquiry a particular rule ought to be altered, refers implicitly to standards for the alteration of rules. These I have called rules of the second order. (Standards for changes of rules of the second order are then called "rules of the third order," and so on.) We might say that the ideal of ultimate pervasive coherence is embodied in the standards for the alteration of rules of procedure.

It thus turns out that we must clearly distinguish between three meanings of "truth," which are related to three different types of judgment in the logic of science, viz.:

(*a*) judgments concerning internal relations among propositions.
(*b*) judgments concerning the acceptability of propositions in terms of *given* standards of validation.
(*c*) judgments concerning principles for the establishment of standards of validation.

In dealing with internal relations among synthetic propositions we are not concerned at all with their validity.

We are passing to another type of logical analysis—namely, to the logic of science (methodology)—when we embark upon a clarification of empirical procedure, and here we must be constantly on our guard against confounding the two types of analysis by interpreting the process of validation in terms of a notion of truth which is supposed to apply to analytical propositions and synthetic propositions alike. This confusion is partly due to the conception of scientific inquiry as a means to a pre-established end, which can be characterized without reference to standards of validation. This conception underlies the usual interpretation of the "belief in truth." But every thorough attempt to determine the nature of this belief, without introducing the idea of an infinite mind, is bound to lead to the conclusion that standards of validation must be referred to in characterizing it.

Peirce's famous declaration of the "faith of the logician" is most revealing in this respect. I shall quote the familiar lines in "How to Make our Ideas Clear." [10]

> . . . all the followers of science are animated by a cheerful hope that the processes of investigation, if only pushed far enough, will give one certain solution to each question to which they apply it. One man may investigate the velocity of light by studying the transits of Venus and the aberration of the stars; another by the oppositions of Mars and the eclipses of Jupiter's satellites; a third by the method of Fizeau; a fourth by that of Foucault; a fifth by the motions of the curves of Lissajoux; a sixth, a seventh, an eighth, and a ninth, may follow the different methods of comparing the measures of statical and dynamical electricity. They may at first obtain different results, but, as each perfects his method and his processes, the results are found to move steadily together toward a destined centre. So with all scientific research. Different minds may set out with the most antagonistic views, but the progress of investigation carries them by a force outside of themselves to one and the same conclusion. This activity of thought by which we are carried, not where we wish, but to a fore-ordained goal, is like the operation of destiny. No modification of the point of view taken, no selection of other facts for study, no natural bent of mind even, can enable a man to escape the predestinate opinion. This great hope is embodied in the conception of truth and reality. The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real. That is the way I would explain reality.

These impressive statements should be apt to eradicate the erroneous view that the interpretation of factual truth in terms of scientific method—i.e., in terms of standards of validation—amounts to an expression of disbelief in truth. Reflections upon the foundations of a *particular* belief are, indeed, frequently indicative of, or conducive to, pertinent doubts. But the belief in truth is not a particular belief, and the analysis of the meaning of

[10] CP 5, 388–410.

this belief is not an analysis of the foundation of a particular belief.

The very quest for a foundation of beliefs implies the belief in truth, as conceived by Peirce. But it does not seem to me that we add something significant to an expression of this belief by stating that it has a foundation in the things; for this statement does not contribute in any way to a corroboration of the belief in truth, nor does it help us in establishing standards of truth.

The same stricture applies to correspondence theories of truth of any type. The preceding analysis has advanced some arguments in support of this stricture, but the correspondence theories raise other problems which lie beyond the scope of logical analysis in a strict sense.

Logical analysis is analysis on a specific level of reflection. Objective meanings are presupposed as given (constituted) on this level; they are data for the analysis to be performed. But philosophical reflection need not stop at this level; it may attempt to clarify the constitution of objective meanings, i.e., the presupposed identity of content of an indefinite number of psychic acts. It may even be suggested that the recognition of different levels of philosophical reflection is a prerequisite for an adequate analysis on each level.

The issue of the relation between meanings and standards of validation is a case in point. We do not establish, we rather presuppose, the meaning of "blue," in declaring that the proposition "there is a blue spot at place *P* at time *T*" may be verified by protocol statements reporting about blue-perceptions. But if we ask: "What is meant by 'blue'?" we are looking forward to an answer which relates this meaning to specific acts of perception. The expression "ostensive definition" is rather unfortunate; still it may be apt to provide a first clue to the understanding of questions of this kind. Such questions have been thoroughly treated in Husserl's phenomenology and particularly in his posthumously published book *Erfahrung und Urteil*.[11]

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THE VARIETY OF PHILOSOPHIC IDIOMS

THERE are many philosophical languages, idiomatically distinguishable from one another and from ordinary language. This fact has been the occasion of a widespread tendency to interpret symbolic *diversity* and mere *difference* of idiom as illustrative

[11] Prague, 1939.

of material philosophical *disagreement*. This tendency has been reinforced by three fallacies which I shall call the fallacy of independent meanings, the fallacy of clear and distinct ideas, and the fallacy of dialectic.

The rules of ordinary language are, it may be observed, not so complete as the rules governing the use of a philosophical language system. Let us begin our discussion with an illustration.

The statement, "John struck James," is a statement which we all understand. If, from this statement, there should be inferred the statement, "There is something or other which struck James," it would be conceded that the inference was drawn in full accordance with the rules for the correct use of language. But one can also ask whether, similarly, it is correct to infer from the premise, "John struck James," the statement, "There is a relation or other holding from John to James." This inferred statement asserts the existence of a Platonic entity. Is it possible that we are, by the ordinary use of language, committed to the acceptance of such entities?

We can express the same dilemma more forcibly. It is commonly agreed, though not by Hegelians, that it is false that anything is distinct from itself. But does it follow from this that we are committed to the affirmation that there is a property such that it is false that anything has it?

Some philosophers will object: "It is really not a question about the use of language. The fact is that there *are* contradictory properties." And other philosophers will say: "It is not a question about language. The fact is that there are no contradictory properties." Some philosophers will say that every concept has actual instances and other philosophers will say that there are concepts which are not exemplified. And some philosophers say that everything is particular. And so it has come about that the dispute has been made to appear to be a dispute about the contents of a possible inventory of objects in the world.

There are terms, occurring in ordinary language, which are readily understood in certain linguistic contexts but which give rise to discomfort and perplexity when they occur in other contexts. No one misunderstands the sense of the word "three" when it occurs in the statement, "Three flowers are in the vase," but one is apt, in ordinary circumstances, to be perplexed by the statement, "Three is an object." One is apt to be perplexed by a statement to the effect that there is a class of all the marbles in a bag, when no marbles are in the bag, or when just one marble is in the bag.

One reason for our perplexity in these cases is that we hesitate

to concede that logic commits us to the making of affirmations about a super-sensible reality. But can we not maintain that the properties which logic investigates are apparent to inspection and therefore verifiable? Do we not directly discern hues, tones, and spatial and temporal relations and are not these properties and is not such intuition verification? Classical logic, however, requires that we assume in addition to properties of this form all Boolean functions of these. Hence we must assume that there is the property which an object has just in case it is either blue or round. But is our intuition ever directed upon such a property as this?

There is a more fundamental question to be considered. We may admit that hues, sounds, and shapes are given. But does experience certify that these data are universals in the sense in which logic speaks of universals? Stout [1] has argued that the hues of two patches are numerically diverse, no matter how much they resemble. But it may be doubted whether the terms which appear in this question are sufficiently definite for the question to be decidable by experience. Expressions like "identity" and "numerical diversity" are precise enough for ordinary purposes. But to settle the controversy between nominalism and realism is hardly an ordinary purpose. It will be noted that Russell's definition of identity does not of itself make anything clear. It is Russell's doctrine of universals which is the environment making that definition of identity significant. And that theory of universals is here in question.

The rules of ordinary language are in some respects indeterminate or vague, for they do not enable us to decide in every case whether a consequence follows or does not follow from a given hypothesis. This indeterminateness or vagueness gives rise to a kind of intellectual dissatisfaction and unrest which in turn may result in the creation of new symbolic forms. For example, *Principia Mathematica* is such a new symbolic structure. The important respect in which it differs from ordinary language is not the superficial typographical difference between them. It is rather that there exists for languages of this sort a set of precise rules which enables one, at least theoretically, to decide in the case of certain formulas of the system that they follow from certain other formulas in the system, whereas the relation between the corresponding statements of ordinary language is indeterminate. Thus, in contrast to ordinary usage it is correct in such languages to say that the set without members has properties. And given a sentence

[1] Stout, G. F., "Nature of Universals and Propositions," *Proc. of British Academy*, Vol. X. *Cf.* McGilvary, E. G., "Relations in General and Universals in Particular," this JOURNAL, Vol. XXXVI (1939), pp. 5–19.

of the form "*aRb*" it is correct in that sort of system to infer that there is a relation holding from *a* to *b*. But someone will ask, does not this imply that logic makes synthetic assumptions about reality?

I answer that the very question assumes that the terms of a symbolic system have meaning in independence of the axioms in which they figure, and that any argument which utilizes such an assumption is a fallacy. I call the fallacy the *fallacy of independent meanings*. The word "exists" is so used in symbolic logic that it is correct to say that the null-class exists, i.e., that there *is* such a class. It is not correct to say, therefore, that in no languages are existence statements analytic. To suppose that the term "exists" in *Principia Mathematica* is the same as the term "exists" in ordinary language is to assume that the term has a meaning which is independent of the axioms and definitions of the system. This is the first of the fallacies to which I wish to call attention. I think from this it follows that if a well-formulated philosophy asserts that there are universals and another well-formulated philosophy denies that there are universals, it is a fallacy to assume that these philosophies contradict one another. It is a fallacy to assume that the verb "exists" has the same sense in philosophies with different presuppositions or axioms.

Some will not be convinced. They will say, "It may be correct in your language system to say that there are universals, but *are* there any? Does the word 'universal' have any denotation?" To understand this question one must refer it to a language in which it has sense. To treat the question as having meaning in independence of the linguistic structure of a particular language is a commission of the fallacy of which I speak. Once this is seen, the question almost answers itself. If the question is taken as part of ordinary language, the answer is problematic. For there is no *general decision* in ordinary language that adjectives are to be used also as nouns. If, on the other hand, the question is referred to languages modelled after *Principia Mathematica,* then the answer is, of course there are universals. It would be a violation of the sense of the word "denotes" to say that there are universals but they are not denoted by the word "universal." Philosophy should not change the rules of language in so far as they are already precise. There would be no use in doing that and positive confusion could come of it.

It has sometimes been argued that terms are simple or complex in their signification. Simple terms are associated with or express clear and distinct ideas. Complex terms, if significant, are definable in terms of simple ones. And sentences, if they are signifi-

cant, are built up by clearly intuitable operations out of significant terms. It is then questioned whether logical systems of the sort here in point conform to this criterion of significance. I am calling this mode of argumentation the *fallacy of clear and distinct ideas*. I call it a fallacy because the acceptance of this criterion makes nonsense of ordinary statements, of physics, of logic, of mathematics, and of philosophy.

There are ascetic souls who would maintain the dogma of clear and distinct ideas and even surrender the world to save their faith. Hume was such a one. But Hume has it to his credit that he saw this dogma to be incompatible with the ordinary acceptance of commonplace things identical in their transformations. Hence his doctrine of the "propensity to feign" and his effort to save the way of ideas though it involved him in the denial of a transcendent nature. One *can* consistently say that discourse about nature and its powers is meaningless because such discourse is not in one to one correlation with clear and distinct ideas. But the demonstrable error lies in identifying the technical term "meaningless" with the ordinary term "meaningless." If, however, this fallacious identification is not committed, the utmost that can be charged against the philosopher is that he is using words arbitrarily or perhaps with a sardonic desire to puzzle and bewilder.

It is sufficiently obvious that many phrases and words function significantly in language although they do not stand for clear and distinct ideas. Those who are interested in modern science will be spared much anxiety if they abandon the quest for intuitive interpretations or models of the abstract systems which science devises.

Ordinary language by its vagueness gives rise to new symbolic forms which are less vague but there is not one unique symbolic form to which the vagueness of ordinary language gives rise. There are a multiplicity of philosophical languages each one claiming to be a revelation of an exclusive truth, each one claiming that the use of the others involves self-contradiction or meaninglessness. The thesis of this paper may be expressed by saying that any effort to vindicate such a claim involves a fallacy and that philosophizing can almost be said not to have begun until such fallacies are understood. Two of the fallacies with which we are concerned have already been discussed. The third, which is the most important of the triad, has to do with the effort to show that a particular philosophy is presupposed or necessitated by statements in ordinary use. The Platonic effort to derive the theory of supersensible reality from the truths of common sense is an illustration of this *fallacy of dialectic*. Another example is the idealist argu-

ment that whatever is known is an idea and that therefore atoms are ideas. The positivist argument that, since only particulars exist, law is merely an economic mnemic device, is another case in point.

All such attempts to *derive* precise philosophical propositions from vague common-sense ones will, I think, be found to depend upon the tacit *substitution* of precise concepts for vague ones. It is then not difficult to demonstrate that alternative philosophic interpretations are self-contradictory by inserting them into a *foreign* language system in which their sense is systematically altered. Thus, Platonists argue that nominalists presuppose the existence of the universals, *particularity* and *similarity*. Nominalists, on the other hand, argue that realists assume that abstract relations are substances.

We may distinguish two forms of the dialectical fallacy. First, this fallacy takes the form of the dialectical refutation of one philosophy in terms of the presuppositions of another. Second, it takes the form of a dialectical derivation of philosophical propositions from the inchoate propositions of everyday life. It has traditionally been regarded as characteristic of philosophical method to perform at least one of these two forms of the dialectical fallacy. As an example of the second form of the dialectical fallacy we may instance Berkeley's pseudo-defense of common sense, a parlor trick imitated by all subsequent philosophies of experience.

That there are various philosophic languages seems to be a fact. Are there criteria for selecting some languages in preference to others, as vehicles for philosophy? The rules of some philosophical languages are more rigorously formulated than those of others. And some languages are richer in their means of expressing what is pertinent to our troubles. And some languages may be misleading in that, in those languages, we may be tempted to deny propositions antecedently known to be true. Thus, if a philosopher asserts that whatever exists exists only as an idea in the mind of God, he is not asserting to be real a universe in any way different from the ordinary one. What, after all, is meant by calling anything an idea in the mind of God? Is it not merely a ceremonious way of saying that it exists and that in the ordinary sense of "idea" it is not an idea at all?

It is not intended here to say that all philosophical statements are either valid or invalid by virtue merely of the linguistic rules of the system to which they are referred. We do urge, however, that the different philosophical languages are different verbal extensions of ordinary language. All of these extensions are worthy of respectful study. For philosophical illumination comes in see-

ing that we may describe the world in different ways. This illumination liberates us from a provincialism to which we are prone and reveals the solidarity of the intellect though it operates in different places and times and circumstances. The cosmic weather changes slowly and our sense of what it is to be real and true is not greatly affected by local conditions. What does matter is that our verbal formulations do differ widely and this difference may breed fanaticism which is the worship of one's own symbols. It is the task of philosophy to liberate man from this fanaticism.

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BOOK REVIEW

Freedom and Experience. Essays presented to Horace M. Kallen. Edited by SIDNEY HOOK and MILTON R. KONVITZ. Ithaca and New York: The New School for Social Research, Cornell University Press. xx+345 pp. $3.50.

This volume of essays, presented to Horace Kallen on his sixty-fifth birthday, is not a symposium on a single subject, nor is it a sustained study of various social and philosophic problems written from a single point of view. The essays range from an informative discussion of the legal status of the Negro (by Milton Konvitz) to a sober and promising analysis of the nature of psychoanalytic propositions (by Ernst Kris). The volume includes a paper by Henry Sheffer, exploring special quantifiers, "the monizer" ("for just one x"), "the rejectional" ("for no x"), and its dual, "the dispersional" ("not for all x"), which will be of considerable interest to logicians, and which, representing as it does one of Dr. Sheffer's too infrequent appearances in print, by itself lends the volume distinction. Some of the essays, such as those by Professors Edmund Brunner and Flaud Wooton, are either expositions of Professor Kallen's philosophy or have been written with that philosophy in mind. But others have been written for other occasions, and have appeared elsewhere. And at least two of the papers, those by Professors Brand Blanshard and Robert Ogden, are explicitly or implicitly critical of points of view with which Professor Kallen has associated himself.

Nevertheless, there is apparent, even in the papers which are critical of Professor Kallen, a common background of philosophic experience which he has had an important rôle in shaping. The themes to which so many of the contributors repeatedly recur—the nature of a liberal philosophy, the bearing of scientific methods on other human activities, the nature and tasks of an empirical and

naturalistic philosophy—are themes which have been central in Mr. Kallen's philosophy; and because they are, as Professor Charles Morris points out, the themes around which much contemporary American philosophy revolves, this volume of essays is representative of much that is going on in current philosophic circles.

The philosophy of liberalism, with which Horace Kallen has been identified, is at present under increasing attack from quarters so divergent that they seem to find their only point of agreement in their common opposition to liberalism. Professor Morris sums up the charges against liberalism as follows: "The movement of thought with which Kallen is identified gives no foundation for individual integration or social unity" (p. 71).

There are, at least on the surface, different motivations for the various attacks on liberalism, but what brings most of them together is the fallacy of disengaging analyses from the specific procedures and problems to which they are relevant. The essays by Professors Morris, Horace S. Fries, Max Otto, and Sidney Hook are all quite plainly written with such attacks in mind, and while each is addressed to a different phase of the problem, each is an attempt to apply a contextualist approach to the formulation of problems and the interpretation of liberal principles.

Professor Morris's essay is the most explicit in making such an approach the crux of the issue in formulating liberalism. Professor Morris places contemporary charges against liberalism in the direct line of descent from the ancient hard-and-fast dichotomies of the One and the Many, Substance and Process, Parmenides and Heraclitus. He argues that the belief that "freedom" and "diversity" do not permit "order" and "integration" arises from interpreting terms in isolation from the appropriate contexts in which they function: either it is assumed that persistence of traits through various contexts is independence of all contexts, or it is assumed that, because objects can only be examined in specific contexts and yet are different in certain respects in different contexts, there is no way of establishing enduring traits.

Though not so explicitly, Professor Fries also employs such an approach in his suggestive essay. To a large extent, Professor Fries employs the arguments, and sometimes the very words, of John Dewey. What is most arresting in his essay in his distinction between social power which is merely "compulsion" and social power which is "actual control" and for which some measure of liberty and diversity is an essential condition. "The more we have to use compulsion, the more uncontrollable become the consequences" (p. 14). I take it that Professor Fries means to dis-

tinguish between the power to limit or suppress the expression of disagreement and the power to achieve planned consequences, and I wish that he had developed this distinction still more fully and systematically, for I find in it the suggestion of a positive reply to the charge that liberalism is "unrealistic"—a realistic social philosophy based on a descriptive consideration of social powers, but which distinguishes between them in terms of what each distinctively accomplishes and fails to accomplish.

Professor Otto discusses freedom of speech in a similar contextualist vein, treating this freedom as a relative and dependent right. Though the relevance of the early part of his paper, a discussion of experiments on the powers of speech of the lower animals, quite escapes me, his main point is clear—human speech is "in its very essence a co-operative venture" (p. 83), and "freedom of speech" calls for cultivation of "the art of listening" as well as "the art of utterance."

Professor Otto has written a genial sermon with his customary charm. Professor Hook has written a hard-hitting sermon with his customary vigor and clarity. Professor Hook characterizes his essay as "a sermon to end sermons" (p. 40). As he no doubt knows, the sermon will fail in its object, but it is a sermon—and, more important, an analysis—which, sadly enough, is very much needed. Professor Hook attacks both the "hard-boiled realism" of certain Marxian apologists and the position of Neo-Calvinists like Reinhold Niebuhr. What emerges from his clear-cut account of the differences between liberalism and these theological and crypto-theological philosophies is a reassertion of persistent liberal principles—the contextualist insistence upon specific problems, the consideration of alternatives as against inevitabilities or total solutions, and the emphasis upon continuity of method rather than upon future goals defined and guaranteed apart from specific procedures. At times Professor Hook's *Weltanschauung* is reminiscent of Voltaire's: "As good a definition of man as any is that he is a creature of crisis. . . . It is *this* crisis which must be overcome, not the general problem of crisis in human history" (pp. 25–26).

In an opaque essay, "On Culture," Jean Wahl provides an illustration of a non-contextualist approach. "Existence," he writes, "is beyond any predicate, and what has to be preserved today is, beyond culture and for culture and by culture, existence" (p. 96). While it is, of course, true that what we say about existing things in any specified context will not necessarily be exhaustive of all their traits, it does not follow that "existence" is beyond *any* predicate; and if "existence" is to be made, by definition, the unspeakable, it would hardly seem desirable to make the unspeakable a moral ideal.

Professor Harry Wolfson's erudite essay, "Causality and Freedom in Descartes, Leibnitz, and Hume," is a witty and informative exercise of historical learning. But it seems to me to prejudge the issue, both in particular, by assuming a notion of freedom to which Professor Morris's criticism applies, and, in general, by using antecedent historical doctrines as the exclusive context for treating the thought of the philosophers with whom he deals. Professor Felix Kaufmann's paper, "Problems of Philosophical Education," contains a remark which throws light on just where Professor Wolfson overplays his very good, but somewhat pre-arranged, historical hand: "Traditional teaching of philosophy is primarily in terms of doctrines; and these doctrines are usually presented as completed systems, which means that they are often detached from the problems that they are supposed to settle" (p. 229). Professor John Herman Randall's historical essay on Hume provides an illuminating contrast to Professor Wolfson's approach to the history of ideas by treating Hume not only in the context of preceding doctrines but in the context of new problems set by the fact of mathematico-experimental science.

It is a commonplace that one of the roots of the philosophy of liberalism is a so-called "faith in science." In its historic career liberalism has been intimately associated with the struggle to introduce methods of free inquiry into human affairs, and is deeply rooted in the western tradition which has given the activity of cognition a central place in the human scheme. But what is meant by "cognition," "science," and "knowledge" makes a great difference, and here there has been an important and persistent ambiguity in the liberal ideal of rationality. John Dewey points indirectly to some of its earlier manifestations in his essay on Locke, and there is abundant evidence in other essays that this confusion continues to exist.

The emphasis upon knowledge as the supreme value may mean two quite different things, depending on the way in which knowledge is interpreted. When, as with Professors Dewey, Hook, Kaufmann, and Nagel, for example, knowledge is interpreted in terms of the self-corrective procedures of the sciences, and without recourse to metaphysical absolutes, the primacy which is given to "knowledge" may mean simply that it is held to be the most pervasive condition for making other values secure. But when the results of an analysis are given an absolute status apart from the selective methods by which they are reached, the assertion of the primacy of "knowledge" often leads to the attempt to show that whatever else is prized is in some sense a kind of knowledge.

The result is illustrated by some of the essays in this volume,

most notably, to my mind, by Mr. Ogden's, which proposes a "science of art," and by Mr. Swift's, which proposes an analogous "science of religion." On the underlying assumption that nothing but knowledge is valuable, these papers make the attempt to salvage art and religion by showing how science may provide evidence for the cognitive validity of what is "asserted" in an art like music or in contemporary religious beliefs. Mr. Ogden's paper proposes a science of art which is apparently to be more than an account of the material conditions, historical, physical, psychological, that go into the production and enjoyment of a work of art: he also wishes this science to show that "the formulations of things seen, heard, read, and done which may be called beautiful are those that make a bid for perfection in terms of things as they are" (p. 188). As this passage may suggest, Mr. Ogden is not easy to follow, and this remark is open to a number of interpretations, although it would seem to have marked Platonistic overtones. But if we place it beside such statements as the following its general drift becomes clearer: "Is not a 'mathematico-vitalistic' starting-point possible which identifies Art and Science without 'mystification'?" (p. 184). "Is it not simpler to agree . . . that all the visions, 'beatific' and otherwise, which insight can reveal to us are grounded in the 'hard facts' of the physical world?" (p. 178). What is continuously ambiguous in Professor Ogden's argument is whether such phrases as "grounded in the physical world" refer to the fact that visions have material causes or to an alleged correspondence between the content of visions and "hard facts." But the ambiguity would seem to be almost an integral and conscious philosophy in view of the support to which Mr. Ogden turns. He rests his case largely on *Gestalttheorie;* and according to him, *Gestalttheorie* "is not merely a new and different way of describing sensory experience; it is a radical inquiry into the laws of nature, including whatever 'esthetic principles' there may be" (p. 176). Like others, Mr. Ogden seems to find in *Gestalttheorie* not only a psychology but a logic of inquiry.

Mr. Swift's essay is clearer than Mr. Odgen's, but he too wrestles with the problem of saving what he prizes by converting it into something else—namely, knowledge. Professor Swift finds the conflict between religion and science to be due to "the fact that science has not yet made even a beginning in formulating the laws of spirit," which he explains as due "both to the character of the phenomena in which it is expressed and to the unwillingness of scientists generally to include these phenomena within the class of objective data deserving of investigation" (pp. 318–319). But surely scientists, e.g., psychologists and psychiatrists, have included

"spiritual phenomena"—i.e., "awareness of a power . . . felt to be real and objective by those experiencing it" (p. 318)—among the objective data deserving of investigation. What Mr. Swift really means to object to, I suspect, is not that such phenomena have not been studied (which is not true), but rather that scientists have been unwilling to accept such visions as carrying their own certificate of validity, or have been unwilling to divorce such events from systems of the behaviors of physical bodies. But if scientists were to break with either of these procedures, would Mr. Swift then have his proposed "science of religion?" It would be idle to go into the arguments, well-known since Hume, which relate to Mr. Swift's position. But it is interesting to note the kind of help for which Mr. Swift is looking: "Dr. J. B. Rhine is currently experimenting with the power of the mind to control the rolling of dice expelled from an automatic throwing device. . . . His results are said to indicate the existence of such control. If this strange phenomenon is validated, both gambler's luck and the rain that follows the Hopi Snake Dance might find scientific explanation! But at what cost to our present peace of mind!" (pp. 320–321).

Van Meter Ames's paper, "Freedom and Responsibility in Creative Activity," is a sober and perceptive study, but even here there are occasional indications of the strength of the tendency to make all valuable enterprises cognitive: "What he [the Negro] tells about himself through his music is perhaps more accurate and delicately nuanced than any statement about him that would be called scientific and just as worthy of being tested" (p. 167). The Negro's music may help us to share the quality of his experience, and such an act of imaginative sympathy may indirectly promote understanding of his situation. But it is difficult to see how what music "reports" can be "tested." As Mr. Ames says, "A convulsive manifestation of grief will always convey it more directly than any word for it" (p. 170), but to cry when someone else cries is a way to social communion but not necessarily to understanding of the conditions and consequences of the grief. On the whole, however, such passages are isolated in Mr. Ames's paper, and in general he is explicit that the cognitive process aims "to demonstrate the truth of general propositions" (p. 161), and that it can not be identical with what it is about, and would be otiose if it were.

Issues which are relatively submerged in other parts of the book come to the surface in the section containing the essays by Professors Kaufmann, Brand Blanshard, and Ernest Nagel, who all address themselves, directly or indirectly, to the problem of the

nature of knowledge and the tasks of philosophy. Professor Blanshard has some interesting and arresting things to say on the causes, intrinsic and extrinsic to contemporary philosophy, that make for "philosophic futility," for the dearth of men and books that "can speak . . . with some sense and sanity on ultimate things" (p. 195). He proposes the philosophic idealism with which his readers are familiar as the cure: "In recognizing the true end of reflection . . . lies the only permanent escape from philosophic futility. . . . The end is simply to *understand*. . . . A system that would satisfy reflection wholly . . . would be a system in which nothing was left outside, and every internal component was intelligible in the light of the rest. The end of thought is logical stability. Such stability will never be finally achieved short of a vision of the whole" (p. 197).

In contrast with this position, we have Professor Kaufmann's logical empiricist view that "the *prime* objective of philosophical education [is] to equip students for the pursuit of clarity" (p. 229, italics mine). There will, of course, be many who will disagree with Professor Kaufmann's comparatively parsimonious conception of philosophy, as well as with many of his specific suggestions for philosophical education and for the resolution of certain philosophic problems. But what is of importance here is the evidence which Professor Kaufmann's essay provides that Mr. Blanshard's philosophy is not after all *the* necessary condition of philosophic utility. Mr. Kaufmann's proposed course in philosophy would not perhaps bring students to see life whole, as Mr. Blanshard wishes; but it would help them to see life steadily, by acquainting them with the wider bearings and assumptions of their specialized activities, and by "forming habits of responsible thinking." "If the teaching of philosophy is successful in this respect, then it can rightly claim a prominent place within the framework of liberal education. No other assignment should be allowed to interfere with the fulfillment of this all-important task" (p. 238). It is also worth noting that Professor Kaufmann's pursuit of clarity permits a genuine largeness of sympathies which finds areas of agreement between such thinkers as Plato and Dewey, and helps him to correct some of the rather facile programmatic distinctions (e.g., between philosophy as the contemplation of all time and all existence, and philosophy as the facilitation of social advance) which are made by Professor Blanshard and others.

Of course, it might be argued that if Professor Kaufmann's proposed course in philosophy indeed possesses such qualities, then he unknowingly holds that particular "high conception of philosophy" which, according to Professor Blanshard, was held by

such diverse thinkers as Taylor, Sidgwick, and Whitehead, and which is an essential condition of philosophic success. But on this issue, as well as on the question of the general adequacy and authority of Mr. Blanshard's ideal of rationality, we have Professor Nagel's accomplished examination of Professor Blanshard's views. I find Mr. Nagel's essay the most exciting contribution in the volume. It has a bearing not only on Mr. Blanshard's views, but on the general tradition of philosophic idealism, and, in particular, on the doctrine of internal relations. Mr. Nagel's critique is at once sympathetic and rigorous, and he succeeds, at least to my satisfaction, in demonstrating that Mr. Blanshard's arguments, lucid and subtle as they are, have nevertheless not succeeded in showing that contingency is not an irreducible feature of the world. If philosophic utility depends on accepting the view that philosophy must seek to demonstrate that contingency is ultimately illusory, then philosophy may indeed be doomed. But surely this is a particular philosophy, and Professor Nagel's essay is evidence that other kinds of philosophy are also possible which can serve both to inspire and guide the energies of sober men.

The volume contains a long and useful, though not altogether complete, bibliography of Professor Kallen's writings, which has been compiled by Earle F. Walbridge.

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BOOK NOTES

L'esprit européen. LÉON BRUNSCHVICG. (Être et Penser: Cahiers de Philosophie, No. 20.) Neuchâtel: Editions de la Baconnière. 1947. 187 pp. 5.50 fr.

These lectures on the European spirit come to us from a Europe which has all but disappeared. They were delivered at the Sorbonne during the first four months of the war, when their author believed that "the immediate future of a civilization not exclusively European, but which had achieved in Europe the clearest and most exact awareness of itself" was at stake. Beginning with the pre-Socratics, the late Professor Brunschvicg traced the history of the European spirit as "a series of crises, each one of which has shown us the necessity of the ceaseless rectifying and purifying of our idea of knowledge." He held that the best pathway yet discovered to "true spirituality" was science as broadly conceived by Émile Boutroux, "the human spirit itself, urging itself on to the understanding of things . . . by penetrating, as it were, to their individuality." But Brunschvicg could not escape the paradox of

technology gone haywire in the hands of the enemy, and one lays down his able and enlightened survey of the history of Western philosophy with the conviction that his sort of philosophic clarity as the basis of spiritual community is not quite enough for the Europe of a mere decade after 1939.

H. A. L.

U. Grozio: l'umanista, il teologo, il giurista. ANTONIO CORSANO. Bari: Laterza. 1948. 288 pp. 900 lire.

No exhaustive conception of Grotius's contributions is here reached. The book is a succession of summaries of Grotius's works, ordered roughly according to their succession, and giving the same weight to poems nobody remembers and to important books as the *De Jure,* etc. The leading idea of the author is that Grotius's thought is to be explained as a heritage of the Renaissance.

The political works of Grotius are treated rather cursorily. The author's interest is devoted mainly to Grotius's religious thought, or rather to his ecclesiastical ideas. But Dr. Corsano is not skilled enough in theological argument and history to give authority to his conceptions. He thinks, for example, the so-called "semipelagian" heresy (which in fact was the main subject of S. Augustine's latest works) is known to us only through its condemnation. One can not solve the problem of predestination by insisting that Calvinistic theology "destroys the (humanistic) dignity" of man. Calvin's contention was that man has *no* inborn dignity.

The author tries to prove Grotius right always, as if he were writing an apology instead of a critical analysis. He praises Grotius (p. 123) for his prudent reserve and in the next page for his uncompromising and outspoken dignity. He tries to explain away an evident contradiction of Grotius (p. 147) by saying that Grotius had no clear idea of what he was speaking about.

The humanistic prejudices of Mr. Corsano do not allow him to see that Grotius's leading theory of the supremacy of the law might have been due to Germanic ideas and not only to Renaissance influences.

On the whole the book can be useful for the accurate summaries of Grotius's less known works. This should spare other students useless research. On the other hand the bibliographical material used by the author is rather limited and consists mostly of Grotius's own works. But Dr. Corsano has the merit of having read them with care.

M. M. R.